IT Audit Performance for Accounting Transaction Security on Rural Banking (BPR) in West Java Indonesia

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***Abstract*-This study aimed to ascertain the performance of Information Technology Governance which include effectiveness, efficiency and Accounting Transaction security of Information Technology at Rural Banking (Bank Perkeriditan Rakyat -BPR) in West Java , through technical Audit and Governance of information technology management with COBIT ver 4.1 framework . Regulation of Bank Indonesia (PBI) No. 9/15/PBI/2007 and Regulation Ministry of information and communication (MIC - SNI.ISO) No.: 41/ PER/ MEN. KOMINFO/II/2007.**

The research method used in this study is the associative method, where the presentation along with measure and analyze the object under study The result of this research is a mapping of information technology governance performance, accounting for Accounting transaction security from banks BPR in West Java through IT Maturity Model of COBIT . The conclusion of these tests are known condition of the average performance of good banking governance and Accouting Transaction Security. .

Keywords: COBIT IT Maturity Model, IT Audit , Regulation of Bank Indonesia, Regulation of MIC

1. INTRODUCTION

Bank also rural Banking, , activu\ity should be base in the Bank Indonesia Regulation (PBI) Number: 9/15/PBI/2007 On the Application of Risk Management in Information Technology Usage By Commercial Banks The extent to which the application of Information Technology has been applied to the accounting transaction banking at Bank BPR accordance with the criteria of Bank Indonesia, and the extent to which information technology controls performed by COBIT ver 4.1. and General Guidelines and Information Technology Governance as outlined in the National Communications regulation No.: 41/PER/MEN. KOMINFO /II/2007.

1.1 Control Objective Related Information Technology (COBIT), and 1.2 Security Transaction Accounting

Control Objectif related Information Technology (CobIT) is *a set of best practice* (*framework*) for *IT management*.). COBIT consist of 4 domain; Pland & Organize , Acquire & Implement, Delivery & Support and Monitoring & Evaluation. To test the application of IT in use refers to the COBIT IT Maturity, IT application consists of the conditions the worst (Non Exstent), to the best (Optimised), the scale of 0-5 Maturity level,

1.2 *Security Transaction Accounting*

In the analysis for the security of information systems with SNI.ISO-IEC.27001-2009, things that are analyzed include: 1) Information Security Policy, 2) Organization of Information Security, 3) Asset management, 4) Physical and Environmental Security, 5) Communications and Operations Management, 6) Access Control, and 7) Maintenance Information System.

2. RESEARCH METHOD

This study has the highest levels when compared with the descriptive research rather than comparative. In this research, there will be built a theory that can serve to explain, predict, and control the symptoms. The steps of reseach is data capture using quesioner, measure IT Maturity Level, and analysis the result.

3. RESULTS AND ANALYSIS

With the number of respondents by 15 BPR, the percentage achievement of the 113 spread is 13.27% This happens due to some unavoidable external constraints include: just waited from “compliance” the BPR Implementation Regulations No.9/15/PBI/2007

3.1. PBI (Peraturan Bank Indonesia) - Application of Risk Management in the Use of IT

The results of the questionnaire responses were deployed on the application of risk management in the use of IT in an active surveillance commissioners and directors, can be seen on the table below:

Table 1 Control Activity by Board Of Director

Control Acivity By BOD		Maturity Value
1	Directing & Evaluating of IT & IS Plan by BDO	2
2	Board of Commissioners of the Board of Directors to evaluate the accountability for the implementation of risk management in the use of Information Technology.	3
3	Directors adopted the Plan Strategic IT and Bank policies related to the use of IT	3
4	Directors ensure that the Bank's information technology used to support business development, achievement of the Bank's business objectives and continuity of service to customers;	3
5	Directors ensure that there are efforts to increase the competency of human resources associated with the use of IT	3
6	Directors ensure that the implementation of the risk management process in the use of Information Technology adequately and effectively implemented;	3
7	Directors ensure that there are policies and procedures adequate Information Technology and communicated and implemented effectively to the work force providers and users of IT	3
8	Board of Directors ensures that there is a performance measurement system implementation process that IT can support at least the process of monitoring the implementation of the strategy;	3
	Avarage of Control Activity by BOD	**2,87**

From the above data shows that the average active surveillance commissioners and directors are at maturity level 3, which is a policy that is set out well and has been maintained well

3.2 PBI - Existence Information Technology Steering Committe,

All respondents stated there is no existence of the steering committee of IT in BPR. So the level of maturity for these factors is Initial. Adequacy of policy factors are also at an average maturity of 3

Table 2 IT Policies & Procedure

Adequacy of policy Information & Technology factors		Maturity Value
1	Have policies and procedures on the management of Information Technology	3
2	Have policies and procedures for the development and procurement of Information Technology	3
3	Have operational policies and procedures concerning Information Technology	3
4	Have policies and procedures on communication networks Information Technology	3
5	Have policies and procedures on information security in the Information Technology	3
6	Have policies and procedures of the Business Continuity Plan for Information Technology	3
7	Have policies and procedures on End user computing for Information Technology	3
8	Have policies and procedures on Electronic Banking for Information Technology	2
9	Have policies and procedures on the use of Information Technology services provider.	3
10	Having a change management application system.	2
	Average of IT Policies & Procedure	**2.80**

From the above data shows that the average IT Policies & Procedure are at maturity level 3, which is a policy that is set out well and has been maintained well

3.*3 PBI- Process Risk Management and Internal Audit Control System and the implementation of IT*

Not unlike the previous factors in Risk Management and Use of IT, that BPR has established policies relating to assessment ratio of IT implementation and management how to minimize these risks by way of good IT management. These activities have been an average of three maturity levels, which is already well-defined policy, and has been managed well, too, The Table maturity level of both factors in a row displaye below:

Table 3 Process Risk Management

Process Risk Management		Maturity Value
1	Physical and environmental controls apply to facilities Data Center (Data Center) and the Disaster Recovery Center;	3
2	Implemented controls appropriate permissions assigned authority;	3
3	Applying control when input, process, and output of data / information	3
4	Attention to risks that may arise from reliance on the use of bank communications network;	3
5	Ensuring the design and operation aspects of the implementation of the communication network in accordance with the requirements;	3
6	Monitoring operational activities including the Information Technology audit trail;	2
	Average of Process Risk Management	**2,88**

From the above data shows that the average Process Risk Management are at maturity level 3, which is a policy that is set out well and has been maintained well.

The result of internal control system are bellow :

Table 4 Internal Control System

Internal Audit Control System and the implementation of IT		Maturity Value
1	Supervision by the management on the use of Information Technology and the control culture;	3
2	Identification and risk assessment carried out on the use of Information Technology	3
3	Conducted control activities using Information Technology	3
4	There is a separation of individual functions as users of Information Technology	3
5	Contained in the Information Technology support in information systems, accounting systems, and communication systems	3
6	There is a monitoring and corrective action for the use of Information Technology deviant continuously	3
7	Made improvements to the use of Information Technology which aberrations occur	3
	Average of Internal Control System	**3,00**

From the above data shows that the average Internal Control System are at maturity level 3, which is a policy that is set out well and has been maintained well

3.4 Analysis of IT Governance Using COBIT 4.1

Analysis of information technology governance in Rural Banks in the study related to accounting transactions to do with security. Therefore, the domain that is used as an analytical tool is Domain Delivery & Support and Domain Monitoring & Evaluation

3.4.1 Domain Delivery & Support

Overall, delivery & support domain conditions are in a state of materity value 3. which means the absence of all information technology services in an integrated.. It is expected that the management in the future, In addition to data in the table above, the following also the data are presented in tabel form as follows maturity level :

Tabel 5 Domain Delivery and Support

No	code	Process	Test Results	Level of Maturity
1	DS1	Establish and manage service levels	4.0	*Manage*
2	DS2	Service arrangements with third parties	4.0	*Manage*
3	DS3	Manage the performance and capacity	4.0	*Manage*
4	DS4	Ensuring the availability of services	3.0	*Defined*
5	DS5	Ensure safety system	2.5	*Repeatable*
6	DS6	Identification and surcharge	4.0	*Manage*
7	DS7	Educate and train users	4.0	*Manage*
8	DS8	Services and help manage incidents	3.0	*Defined*
9	DS9	Set Configuration	2.0	*Repeatable*
10	DS10	Managing The Problem	3.0	*Defined*
11	DS11	Manage Data	5.0	*Optimized*
12	DS12	Manage Facilities	2.0	*Repeatable*
		Average of Domain Delivery and Support	**3.3**	***Defined***

From the above data shows that the average Iof Domain Delivery and Support are at maturity level 3, which is a policy that is set out well and has been maintained well

3.4.2 Domain Monitoring & Evaluation

All of the information technology needs to be assessed regularly and periodically how quality and compliance with control requirements. This domain is analyzed through this monitoring & evaluation

Unlike delivery & support domain, this domain is likely to have an average maturity level 2. So policies to regulate the monitoring and inspection of compliance with control requirements have been specifiedEffective rate management process is institutionalized, by allowing Rural Bankis to repeat previous successful experience in monitoring. It will be more visible in the tabel below:

Tabel 6 Domain *Monitor and Evaluate*

No	Code	Process	Test Results	Level of Maturity
1	ME1	Monitor and Evaluate IT Performance	5.0	*Optimized*
2	ME2	Monitor and Evaluate Internal Control	5.0	*Optimized*
3	ME3	Obtain independent assurance	4.0	*Manage*
4	ME4	Provision for IT governance	4.0	*Manage*
		Average of Domain Monitor and Evaluate	**4.5**	***Manage***

From the above data shows that the average of Domain Monitoring and Evaluate are at maturity level 3, which is a policy that is set out good and has been maintained good

3.5 Analysis of the Information Systems Security with SNI.ISO-IEC.27001-2009

In the analysis for the security of information systems with SNI.ISO-IEC.27001-2009, Information systems security conditions in some of BPR based on responses from them are as follows

Tabel 7 Security of IT Transaction Accounting

No	Item that are analyzed	Maturity Value
1	Information Security Policy	4
2	Organization of Information Security	5
3	Asset management	2
4	Physical and Environmental Security	5
5	Communications and Operations Management	4
6	Access Control	5
7	Maintenance Information System	2
	Avarage of Security IT Transaction Accountinmg	**3.85**

From these images will be seen that the maturity level is still below the three asset management and maintenance of information systems. This means that the activity has not been accompanied by the use of information technology policy for documenting the use of IT, liability To the management of IT, and for classifying information.

4 CONCLUSION

Based on the analsys it can be concluded the following:

1. Conditions of application of the Regulation of Bank Indonesia No.9/15/PBI/2007 average is at maturity level three, which means that the management of information technology has been entered in good policy and has been managed well too.
2. Performance Conditions Information Technology Governance Using COBIT 4.1 model also in the average maturity level three, its mean define.
3. Conditions Transaction Security Accounting / Information Systems Security in terms of SNI.ISO-IEC.27001-2009 average are at their maturity three. As well as IT governance performance SI safety conditions for both the respondent and even then are at a maturity level.

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